

IN THE CLAIMS:

Please amend claims 9 and 20.

Please cancel claims 2-6, 18, 21-24, 26-29, and 31-33 without prejudice.

Claim 1. (Previously presented) A rock auger comprising:

a drive shaft having a longitudinal axis, means at one end of said drive shaft for connecting a first end of said drive shaft to a power driven unit and a cutting head mounted on and projecting from a second end of said drive shaft, said cutting head including a side wall connecting a top edge and a bottom edge defining a tubular body disposed co-axial with said drive shaft and terminating in a free outer end spaced a selected distance from the second end of said drive shaft, a plurality of conical teeth mounted on said bottom edge of said side wall and extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about said axis, said side wall having at least one opening extending from said top edge of said tubular body a selected distance there through forming a cutaway portion extending downwardly from said top edge.

Claim 2. (Canceled)

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Canceled)

Claim 6. (Canceled)

Claim 7. (Previously presented) An auger apparatus comprising:

a cutting head including a side wall defining a tubular body and end plate;
means at one end of said cutting head for connecting said end plate to a power driven unit;
a plurality of teeth mounted on said side wall extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about an axis, said side wall including an opening defining a cutaway portion including lateral edges;

said body includes a cutaway portion extending around the periphery thereof a selected length forming an edge extending along a portion of said side wall generally parallel and vertical to said axis.

Claim 8. (Previously presented) An auger apparatus comprising:
a cutting head including a side wall defining a tubular body and end plate;
means at one end of said cutting head for connecting said end plate to a power driven unit;
a plurality of teeth mounted on said side wall extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about an axis, said side wall including an opening defining a cutaway portion including lateral edges;

said body includes a cutaway portion extending around the periphery thereof a selected length forming an edge extending along a portion of said side wall generally disposed at an angle and generally parallel to said axis.

Claim 9. (Currently amended) The auger apparatus of claim [[5]] 7, further comprising a pilot drill extending from an said end plate, said pilot drill disposed within said tubular body and extending in axial alignment therewith.

Claim 10. (Original) The auger apparatus of claim 9, wherein said pilot drill extending pass said teeth extending from said lower peripheral edge of said cutting head.

Claim 11. (Original) The auger apparatus of claim 9, wherein said pilot drill includes a removable tip.

Claim 12. (Previously presented) An auger apparatus comprising:
a cutting head including a side wall defining a tubular body and end plate;
means at one end of said cutting head for connecting said end plate to a power driven unit;
a plurality of teeth mounted on said side wall extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about an axis, said side wall including an opening defining a cutaway portion including lateral edges;

said means for connecting includes an end plate connecting to at least a portion of said side wall forming said tubular body of said cutting head opposite said teeth, joining at least two points of said side wall;

a pilot drill extending from an end plate, said pilot drill disposed within said tubular body and extending in axial alignment therewith; and

means for reinforcing and bracing said pilot drill shaft mounting to said bottom surface of said end plate.

Claim 13. (Original) The auger apparatus of Claim 12, wherein said means for reinforcing and bracing said pilot drill shaft comprises at least one reinforcing member extending from said bottom surface of said mounting end plate and attaching to at least one selected point of said pilot drill shaft.

Claim 14. (Original) The auger apparatus of Claim 12, wherein said means for reinforcing and bracing said pilot drill shaft comprises a plurality of tapered support plates having a broad base extending from said bottom surface of said mounting end plate and a tapered end attaching to said selected point of said pilot drill shaft.-

Claim 15. (Original) The auger apparatus of Claim 14, wherein said tapered support plates are welded all along the edge to said pilot drill shaft extending to a point near said drill tip.

Claim 16. (Original) The auger apparatus of Claim 9, wherein said distal end of said pilot drill shaft ends in a short cylindrical collar including means for removably attaching said drill tip.

Claim 17. (Previously presented) An auger apparatus comprising:
a cutting head including a side wall defining a tubular body and end plate;
means at one end of said cutting head for connecting said end plate to a power driven unit;
a plurality of teeth mounted on said side wall extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about an axis, said side wall including an opening defining a cutaway portion including lateral edges;
said tubular body further comprising a double side wall having an overlapping lateral cutaway portion staggered forming a double edge.

Claim 18. (Canceled)

Claim 19. (Previously Presented) An auger apparatus comprising:
a cutting head including a side wall defining a tubular body and end plate;
means at one end of said cutting head for connecting said end plate to a power driven unit;
a plurality of teeth mounted on said side wall extending from the free end thereof in an array about the periphery of an opening of selected diameter into a cavity defined by said side wall, said cavity being of selected depth for receiving therein a plug cut from said material by said teeth as said tubular body is rotated about an axis, said side wall including an opening defining a cutaway portion including lateral edges;
said cutaway portion of said tubular body extends around the periphery thereof a selected length extending from a lower peripheral cutting edge toward said end plate, said cutaway portion

forming at least one lateral cutting edge.

Claim 20. (Currently amended) The auger apparatus of claim 9, wherein means at one end of said cutting head for connecting said end plate to a power driven unit ~~means for cooperatively engaging a drive shaft extends from a top surface of said end plate and~~ comprises a socket shaped for cooperatively engaging a drive shaft having a diameter less than said cutting head, said drive shaft including a proximal end cooperatively engaging said socket of said end plate and having an opposing distal drive end extending therefrom.

Claim 21. (Canceled)

Claim 22. (Canceled)

Claim 23. (Canceled)

Claim 24. (Canceled)

Claim 25. (Original) An auger apparatus, comprising:

a cylindrical hollow cutting head comprising a hollow cylindrical body defining side wall connecting to an end plate extending between said side wall enclosing at least a portion of a top end of said hollow cylindrical body, and a lower open end defining a lower peripheral cutting edge including a plurality of teeth extending from said lower peripheral edge;

said side wall of said hollow cylindrical body including at least one opening therein;

a drive shaft having a diameter less than said cutting head, said drive shaft including a proximal end connecting to a top surface of said end plate and having an opposing distal drive end extending therefrom; and

a pilot drill extending from a bottom surface of said end plate, said pilot drill disposed within said cylindrical hollow cutting head and extending in axial alignment with said drive shaft;

said pilot drill having a removable tip;

said pilot drill extending pass said teeth extending from said lower peripheral edge of said cutting head; and

a cutaway portion of the body extending around the periphery thereof a selected length forming an opening extending along a portion of said side walls extending from said lower peripheral cutting edge to a selected point of said end plate, said cutaway portion forming an angled lateral side wall edge.

Claim 26. (Canceled)

Claim 27. (Canceled)

Claim 28. (Canceled)

Claim 29. (Canceled)

Claim 30 (Previously presented) An auger apparatus, comprising:

a cylindrical hollow cutting head comprising a hollow cylindrical body defining side wall connecting to an end plate extending across and joining said side wall enclosing at least a portion of said hollow cylindrical body, said cylindrical hollow cutting head having a lower open end defining a lower peripheral cutting edge including a plurality of teeth projecting from said lower peripheral cutting edge;

means for cooperatively engaging a drive shaft extending from a top surface of said end plate;

a cutaway portion of the body extending around the periphery thereof a selected length forming an opening extending along a portion of said side walls extending from said lower peripheral cutting edge to said end plate, said cutaway portion forming a lateral side wall edge.

said hollow cylindrical body further comprising a double side wall having an overlapping lateral cutaway portion staggered forming a double side wall edge.

Claim 31. (Canceled)

Claim 32. (Canceled)

Claim 33. (Canceled)